



Product Specifications

November 2009

| | | | |
|---------------------------------|--|---------------|---------------|
| Product | TuffPlank | | |
| Model | XP | XL | GS |
| Material Specifications | | | |
| Core Material Base | All Plastic | | |
| Core Color | Black | White | |
| Facing | 2 Sided Tuff Plastic | | |
| Surface Finishing | Smooth | | |
| Surface Color | Light grey | | |
| Metal Reinforcement | Yes | | |
| Metal Type | Aluminium | Treated Steel | |
| Repairable | Yes | | |
| Color Selection | Primary Colors | | |
| Technical Values | | | |
| Density, Kg/m ³ | 540 - 660 | 420 - 520 | 450 - 710 |
| Bending Modulus, Mpa | 4500 - 5600 | 4600 - 5700 | 11000 - 13000 |
| Bending Strength, Yield, Mpa | 12 - 14 | | 20 - 26 |
| Bending Strength, Ultimate, Mpa | 17 - 22 | | 26 - 35 |
| Operating Temperature, °C | -30 to +90 | -20 to +75 | |
| Thermal Expansion, mm/m/10°C | 0.9 | 0.6 | |
| Water Absorbtion, % | 0.2 | 0.6 | |
| Working Conditions | | | |
| Sawing | Similar To Wood | | |
| Cutting | | | |
| Nailing / Screw | | | |
| UV Resistance | Yes | | |
| Impact & Abrasive Resistant | Yes | | |
| Chemical Resistant | Resistant to most acids, alkali. Avoid petroleum | | |
| Flamability | Low | Extremely Low | |
| Environmentally Friendly | Yes | | |
| Termite Resistant | Yes | | |
| Product Dimensions | | | |
| Standard Width, mm | 230 to 1000 | | |
| Max. Length, mm | 5000 | | |
| Thickness, mm | 25, 32, 38 & 45 | | |
| Dimension Tolerance, mm | LW +/-1.5 Diagonal +/-5 | | |
| Thickness Tolerance, mm | +/-0.4 | | |

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TUFFPLANK TECHNICAL DATA

November 2009

****Notes**

Data are based on manufacturer's testing and will be subjected to changes from time.
Use of board should not exceed its permissible bending strength. Will cause permanent deformation in flatness.

Metric Units

| Model | TuffPlank - XP | | | | TuffPlank - XL | | | | TuffPlank - GS | | | |
|------------------------|----------------------------|----------|----------------------------------|-----------------------------------|----------------------------|----------|----------------------------------|-----------------------------------|----------------------------|-----------|----------------------------------|-----------------------------------|
| Thk, mm | TECHNICAL DATA | | | | | | | | | | | |
| | Density, Kg/m ³ | MOE, Mpa | Ultimate Bending Strength, (Mpa) | Allowable Bending Strength, (Mpa) | Density, Kg/m ³ | MOE, Mpa | Ultimate Bending Strength, (Mpa) | Allowable Bending Strength, (Mpa) | Density, Kg/m ³ | MOE, Mpa | Ultimate Bending Strength, (Mpa) | Allowable Bending Strength, (Mpa) |
| 25.0 | 665.00 | 5,600.00 | 22.00 | 14.00 | 525.00 | 5,700.00 | 22.00 | 14.00 | 710.00 | 13,200.00 | 35.00 | 26.00 |
| 32.0 | 600.00 | 4,800.00 | 21.00 | 13.00 | 460.00 | 4,900.00 | 21.00 | 13.00 | 610.00 | 11,200.00 | 27.00 | 22.00 |
| 38.0 | 615.00 | 5,100.00 | 19.00 | 13.00 | 470.00 | 5,200.00 | 19.00 | 13.00 | 620.00 | 12,400.00 | 30.00 | 24.00 |
| 45.0 | 550.00 | 4,500.00 | 17.00 | 12.00 | 425.00 | 4,600.00 | 17.00 | 12.00 | 540.00 | 11,100.00 | 26.00 | 20.00 |
| Usage Temperature (°C) | -30 +90 | | | | | | -20 +75 | | | | | |

Imperial Units

| Model | TuffPlank - XP | | | | TuffPlank - XL | | | | TuffPlank - GS | | | |
|------------------------|-----------------------------|-----------|----------------------------------|-----------------------------------|-----------------------------|-----------|----------------------------------|-----------------------------------|-----------------------------|-------------|----------------------------------|-----------------------------------|
| Thk, " | TECHNICAL DATA | | | | | | | | | | | |
| | Density, lb/ft ³ | MOE, psi | Ultimate Bending Strength, (psi) | Allowable Bending Strength, (psi) | Density, lb/ft ³ | MOE, psi | Ultimate Bending Strength, (psi) | Allowable Bending Strength, (psi) | Density, lb/ft ³ | MOE, psi | Ultimate Bending Strength, (psi) | Allowable Bending Strength, (psi) |
| 1 | 41.51 | 812,207.2 | 3,190.81 | 2,030.52 | 32.77 | 826,710.9 | 3,190.81 | 2,030.52 | 44.32 | 1,914,488.4 | 5,076.30 | 3,770.96 |
| 1 ^{1/4} | 37.46 | 696,177.6 | 3,045.78 | 1,885.48 | 28.72 | 710,681.3 | 3,045.78 | 1,885.48 | 38.08 | 1,624,414.4 | 3,916.00 | 3,190.81 |
| 1 ^{1/2} | 38.39 | 739,688.7 | 2,755.70 | 1,885.48 | 29.34 | 754,192.4 | 2,755.70 | 1,885.48 | 38.70 | 1,798,458.8 | 4,351.11 | 3,480.89 |
| 1 ^{3/4} | 34.33 | 652,666.5 | 2,465.63 | 1,740.44 | 26.53 | 667,170.2 | 2,465.63 | 1,740.44 | 33.71 | 1,609,910.7 | 3,770.96 | 2,900.74 |
| Usage Temperature (°C) | -86 +194 | | | | | | -68 +167 | | | | | |

Handling Conditions

| | |
|---------------|-----------------|
| Nail Holding | Similar to Wood |
| Sawing | |
| Drilling | |
| UV Resistance | |
| Recycable | Yes |

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